

Atty. Dkt. No. 074022-3302

REMARKS

Claims 59, 60 and 61 have been amended and claim 62 has been newly added. No amendments have been made to obviate prior art. Support for the amendments and the new claim is found generally. Accordingly, the amendments and the new claim raise no issue of new matter.

Interview Summary

Applicants thank Examiner Marschel for the courtesies extended in the telephonic interview of November 30, 2004 where issues raised by the Examiner in the Advisory Action mailed April 7, 2004 were discussed. The amendments and remarks herein reflect the discussion of the April 11, 2005 interview, and the conclusion that such submission may place the case in condition for allowance.

Applicants wish to clarify on the record an apparent misunderstanding about a previous telephonic interview held on January 5, 2005, which was referenced in an Amendment After Final Rejection filed by the Applicants on January 5, 2005. Specifically, a statement at page 2 of the Advisory Action mailed April 7, 2005, suggests that the January 5, 2005 interview had not taken place. This conclusion was reached by Examiner Marschel because he did not recollect the meeting and because there was no Examiner Interview Summary Record in the USPTO case file. However, during the interview of April 11, 2005, Examiner Marschel indicated that his Examiner interview summary of January 5, 2005 had apparently reached the file after he completed the Advisory Action. Examiner Marschel stated in the interview of April 11, 2005 that he now agrees with the Applicants that the interview of January 5, 2005 had indeed taken place.

Atty. Dkt. No. 074022-3302

Improper Multiple Dependence

In the Final Office Action mailed November 30, 2004, the Examiner objected to claim 61 as being a multiple dependent claim that depends from other multiple dependent claims. In the Amendment After Final Rejection filed on January 5, 2005, Applicants amended claim 61 to refer only to non-multiple dependent claims. However, in the Advisory Action mailed April 7, 2005, the Examiner objected to the amendment on a new ground, i.e., that the claim referred to more than one statutory class of invention. It was agreed in the interview of April 11, 2004 that Applicants would amend claim 61 to eliminate the reference to other multiple dependent claims and avoid reading on more than one type of statutory class of invention. Examiner Marschel also agreed for Applicants to propose an additional claim (now claim 62) otherwise similar to claim 61 but directed to composition of matter.

Accordingly, reconsideration and withdrawal of the objections is respectfully requested.

New Matter Rejection

In the Final Office Action mailed November 30, 2004, the Examiner alleged that the language in claims 56, 58 and 60 referring to the absence of interconnections between channels constituted new matter because the specification at page 24, lines 18-22 allegedly describes this feature in conjunction with achieving laminar flow character. In the Amendment After Final Rejection, Applicants respectfully submitted that (1) the rejection is without basis because there is no requirement for a functional result to be recited with a clear negative limitation on structure (i.e. no interconnections); and (2) because there was additional support in the specification for interconnections that did not reference laminar flow. In the latter case, Applicants pointed to the specification at page 28, lines 8-9. In the Advisory Action, Examiner Marschel maintained the rejection allegedly because the reference to no interconnections in the newly cited specification text also included a mention of "within the materials."

Atty. Dkt. No. 074022-3302

The new matter rejection and the language in the specification at page 28, lines 4-9 was discussed during the April 11, 2005 Interview. For convenience of the Examiner the relevant text of the specification is below.

The advantage of a limited channel density is the production of non - tortuous paths which permit for low outgassing in the subsequent deposition steps, and reduction of material retained in the channel structure. The channels created are discrete and there is no interconnection within the materials.

The Examiner raised the possibility that the language referring to no interconnections "within the materials" necessitated that absence of channel interconnections was inextricably linked to "within the materials." The Examiner supported this notion on the basis of a formalistic reading that "the materials" requires an antecedent basis which is present in the word "material" (singular tense) in the immediately preceding sentence. The Examiner favored this view also because the immediately preceding sentence described use of non-tortuous paths and reduction of material retained in the channel structure.

Applicants pointed out that application of a formalistic reading to "the materials" in the last sentence and "material" in the preceding sentence militates *against* a conclusion that the two statements are linked because "the materials" refers to materials in plural while "material" is written in the singular tense. Furthermore, it is respectfully submitted that, formalities aside, one of ordinary skill would understand the term "material" to mean different things when read in the context of the full sentences. In the first sentence, "material" clearly would be understood to refer to matter *within* a non-tortuous channel. In contrast, in the second sentence, "the materials" would be understood to refer to the medium through which the non-interconnect channels run (i.e. "within the materials"). The key distinguishing language "material in the channel" versus "[channel] within the materials," shows clear non-identity. In any event, leaving aside the issue of antecedent basis, the claims need not recite non-interconnected channels "within the materials" because such phrase states the self-evident, that channels occur within the materials of the device.

Atty. Dkt. No. 074022-3302

Furthermore, the Examiner is reminded that there is teaching in the specification for the use of non-interconnected channels where no reference is made to "material" (or even "the materials"). See page 24, lines 18-22.

Accordingly, on the basis of the foregoing, the Examiner is urged to reconsider and withdraw the new matter rejection.

Obviousness-type Double Patenting

The Examiner has provisionally rejected claims 1, 2, 5-12, 23-24, 26-34, and 36-50 under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 51-52, 54-55, 57-63, 66-68, 70-71, 73-79, and 82 of copending Application No. 09/675,518. The rejection is respectfully traversed.

Applicants note that a terminal disclaimer has since been filed and approved in the copending application which disclaims patent term relative to the instant case. Applicants further note that a Notice of Allowance has issued in the co-pending case. The independent claims the now allowed copending case (claims, 51 and 67) are provided below the Examiner's convenience.

51. A support comprising a surface on which an assay for an analyte of interest can be performed, comprising:

an attachment layer comprising diamond-like carbon having sp^2 and sp^3 character on the support surface, wherein the attachment layer is adapted for capture of the analyte of interest for detection in the assay by binding the analyte directly to the diamond-like carbon; and

an optically functional layer, an optical property of which is detectably altered upon a change in mass on said optically functional layer related to analyte binding, positioned on said support.

Atty. Dkt. No. 074022-3302

67. A support comprising a surface on which an assay for an analyte of interest can be performed, comprising:

an attachment layer comprising a layer of diamond-like carbon having sp^2 and sp^3 character of between about 50 Å to about 500 Å in thickness on the support surface, wherein said attachment layer comprises a capture molecule bound to said diamond-like carbon for specific capture of said analyte by binding said analyte to said capture molecule.

It is respectfully submitted that claims of the instant application are patentably distinct over the claims of the allowed Application No. 09/675,518 on the basis that each of the claims of the instant application recite channels and/or a porous support whereas none of the claims of the copending application contain such limitations. As such, Applicants respectfully submit that no terminal disclaimer is needed in the instant case.

Accordingly, the Examiner is urged to reconsider and withdraw the rejection.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if there are any remaining issues in the case.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

Atty. Dkt. No. 074022-3302

entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

Date April 14, 2005By 

FOLEY & LARDNER LLP
Customer Number: 30542
Telephone: (858) 847-6700
Facsimile: (858) 792-6773

Barry S. Wilson
Registration No. 39,431
For Richard J. Warburg
Attorney for Applicant
Registration No. 32,327